Retrospect of a Coleopterist for 1908.

By Prof. T. HUDSON BEARE, B.Sc., F.R.S.E., F.E.S.

I have this year to note the largest increase to our list for many years, though, I may say frankly at once, I am of opinion that some of these additions will not stand the test of time. In view of the unusual length of the retrospect of last year, I propose to condense considerably my remarks on this occasion in reference to most of the additions, which I will now take in order.

Notiophilus pusillus, Wat. (=bigeminus, Th.), introduced by Dr. Joy, Ent. Mo. Mag., xliv., p. 103. As I write this article, the January number (1909) of the above journal has appeared, and Dr. Joy, on

page 12, withdraws this addition.

Notiophilus hypocrita, Spaeth., introduced by Dr. Joy (loc. cit., p. 103); this species (?) is not recognised by Ganglbauer, and I agree with Mr. Champion that it "is a very dubious species, and scarcely more than a variety."

Dromius augustus, Brulle.—Mr. Champion (loc. cit., p. 125) introduces this species on specimens taken in July 1906 at Woking, under bark; it is perhaps mixed with meridionalis, Dej., in our

collections.

Laccobius purpurascens, sp. n.—Mr. Newbery described this insect (loc. cit., p. 30) as new to science from specimens taken by Mr. de la Garde, in May, 1906, at Shaldon, Devon; it has also been taken by Mr. Champion and Mr. Keys in Devonshire. The describer gives no structural characters to separate it from nigriceps, Th., and I am of opinion that it is not entitled to specific rank, and that it is a mere colour variety.

Helephorus porculus, Bedel.—This species, which had already been recorded as British, has now been definitely brought forward by Mr. Newbery (loc. cit., p. 88); it has been confused with rugosus, Ol. I

have this summer taken it at Nethy Bridge.

Helephorus griseus, Hbst.—Mr. Édwards (loc. cit., p. 218) has worked out a fresh table for the identification of this extremely difficult genus, and has given some notes as to the distribution of the species in this country; as far as I can make out, he has added the above species to our list—he states that brevipalpis, Bedel, and griseus, Hbst., are equally common. Canon Fowler (Col. Brit., vol. i., p. 239) gives the latter insect as perhaps a synonym of brevicollis, Thoms.

Aleochara crassiuscula, Sahlb.—Taken by Mr. West at Yarmouth and at Lewisham, also by Mr. Walker at Oxford, and introduced by Mr. Champion (loc. cit. p. 194), who says it is closely allied to

tristis, Gr.

Oxypoda perplexa, Muls.—Dr. Joy states (loc. cit., p. 51) that he has submitted specimens of an Oxypoda, taken by himself in rabbit-burrows at Streatley, to Capt. Deville, who thinks they are the above species, though "he will not absolutely commit himself to them." Dr. Joy appears to have no doubt as to the correctness of the identification. In view of the fact that it was a species unknown to Ganglbauer, it is a pity Dr. Joy did not go to the original description given by Mulsant and Rey—according to these authors exoleta, Er., is by no means confined to the coast.

Calodera protensa, Man.—This species has been taken by Mr.

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Harwood in an osier bed at Colchester, and was introduced by Mr. Champion (loc. cit., p. 225), who says it is allied to C. nigrita, Man.

Philouthus concinnus, Grav.—Dr. Joy points out (loc. cit., p. 51) that most of the specimens standing in our collections under the name of cheninus, Grav., are the above species, which is a much smaller insect, and has the penultimate joint of the antennæ more transverse. I have taken true concinnus at Sandown, Isle of Wight.

Olophrum assimile, Pk.—This species was taken in numbers in flood-refuse on the banks of the Spey, near Nethy Bridge, by Mr. Donisthorpe and the writer, last September (Ent. Record, xx., p. 255).

Clambus punctulum, Beck.—Mr. Donisthorpe (loc. cit., p. 293) introduces this species again to our list on specimens taken by evening sweeping at Chattenden; it is separable from minutus, Stm., by the

form of the antennal joints, and its size.

Anisotoma flavicoruis, Ch.—This species has been confused with parvula, Sahl. Dr. Joy (Ent. Mo. Mag., p. 174) pointed out the difference, and stated that he had taken it at Bradfield. Mr. Champion later (loc. cit., p. 206) gave a number of localities in which he had found it.

Colon zebei, Kr.—This is considered a genuine species by Ganglbauer, and Dr. Joy (loc cit., p. 38) says that it differs from dentipes, Sahl., of which it has been treated as a variety only, in shape, punctuation, and

pubescence.

Euplectus bescidicus, Reitt.—Dr. Joy introduces (Ent. Record, xx., p. 56) this species on specimens taken under bark at Enfield by Mr. Pool; there are specimens in the Bates' collection taken by Lawson at

Scarborough.

Corticaria linearis, Payk.; C. eppelsheimi, Reitt.; C. longicollis, Zett.—In an interesting article on the genus, in which he gives a valuable table, Dr. Joy states that all these three species must be introduced to our list. Canon Fowler (Brit. Col., vol. iii., p. 292) expressed the opinion that linearis and longicollis had been taken in this country, and Dr. Joy gives localities for all three. Dr. Joy expresses the opinion that he has been unable to find any authentic British specimens of C. obscara, Bris., and that, therefore, that species must disappear from our list (Ent. Mo. Mag., xliv., p. 125).

Mclanopthalma truncatella, Man.—Introduced by Dr. Joy (Ent. Record, xx., p. 91) on specimens taken in Norfolk; it is entirely

testaceous.

Cryptophagus lovendali, Gangl.—This species, which is treated by Ganglbauer and by Lovendal as a variety of pubescens, Stm., has been taken in the New Forest by Mr. Champion (Ent. Mo. Mag., xliv., p. 123), and he is of opinion that it is a perfectly distinct species, separable from pubescens by its three jointed-club.

Cryptophagus hirtulus, Kr.—Taken by Dr. Joy (loc. cit., p. 178) in the Scilly Islands, on a cellar window, and under haystack refuse. Mr.

Newbery has a specimen taken years ago in a house at Merton.

Micrambe rillosa, Heer (=pilosnla, Heer). This species, treated by Ganglbauer as a variety, by Capt. Deville as a species, is introduced by Mr. Newbery (loc. cit., p. 105); it appears to differ from vini, Pz., a beetle which occurs all over the country in countless profusion on gorse, etc., only in the fact that it is a trifle larger, and has some longer upright hairs mixed with the decumbent pubescence. To create

species on such grounds as this seems to reduce the whole question of specific characters to mere trifling.

Litarans coloratus, Rosen.—Taken by Mr. T. R. Hardy in Sherwood Forest, in June, 1907, in fungus on a holly log (loc. cit., p. 104); it is

introduced by Messrs. Joy and Tomlin.

Parnus (Dryops) luridus, Er.—Mr. Edwards, who introduces this species (loc. cit., p. 102), states that it can only be determined with certainty when mixed with prolifericornis, F., by the male genitalia.

Longitarsus nigerrimus, Gyll.—This species is introduced also by Messrs. Joy and Tomlin (loc. cit., p. 104) on the authority of specimens

taken by Dr. Wallace at Cleethorpes in September, 1907.

Phyllotreta diademata, Foudr.—Mr. Newbery (loc. cit. p. 148) introduces this species, and says that Capt. Deville has confirmed his identification; the specimens were taken by Mr. de la Garde in South Devon: it is a close ally of atra, F., and punctulata, Marsh., and belongs, therefore, to a very difficult group of the genus.

Centhorhynchus mogantiacus, Schultze.—This is the insect mentioned by Canon Fowler (Col. Brit., vol. v., p. 349) as viridipennis, Bris.; Mr. Champion in introducing it says (loc. cit. p. 2) that it may prove to be

only a form of C. timidus, Weise (= chalybaens, Brit. Cat.).

Centhorhynchus parrulus, Bris.—Taken by Mr. de la Garde by sweeping Lepidium heterophyllum, at Braunton, Devon, last June, and introduced (loc. cit. p. 195) by Mr. Newbery; the suture has a band of closely packed white scales; it is like C. floralis, Pk., but is easily

separated by the seven joints to the funiculus of the antennæ.

Aracocerus fasciculatus, de Geer.—This cosmopolitan insect is recorded by Mr. F. H. Day (loc. cit. p. 265) as breeding in a biscuit factory at Carlisle; it is probable it will, like many similarly worldwide species, spread throughout the country; the insect introduced by Mr. Newbery some years ago as Tropideres hilaris, Fahr., was in reality the above insect; the error was said to have arisen from comparing it with "a bad type," whatever that may mean.

The following varieties have also been added to our list:

Notiophilus aquaticus var. strigifrons, Baudi. (loc. cit., p. 271), taken at Braemar, by Mr. Champion, who now appears to incline to the view that it is a var. of pusillus, Wat., but Ganglbauer treats it as a var. of aquaticus; it appears to be a mountain form.

Carabus violaceus, L.—The British specimens of this species are said to be a subspecies, which Hartert calls sollicitans (Champion, loc.

cit., p. 124).

Sunius angustatus var. lyonessius.—Dr. Joy says (loc. cit., p. 177) that the specimens he took in the Scilly Islands are a subspecies, but as, apart from some difference in the punctuation of the elytra, the difference from the type seems to be mainly colour differences, and as Canon Fowler (Col. Brit., vol. ii., p. 321) says that the colour of angustatus and dirersus is very variable, I would be inclined to say it is a mere variety, and I would deprecate even giving it a name, especially the name suggested, in view of the fact that Mr. Donisthorpe says he has found it in the Isle of Wight.

Meligethes viduatus, Stm. var. aestimabilis, Reitt.—Taken by Mr.

Day at Carlisle, and introduced by Mr. Newbery (loc. cit., p. 89).

Bruchns rufimanus, Boh. var. velutinus, Muls.—Mr. Champion finds (loc. cit., p. 1) that his exponents of affinis, Fröh., are this variety.

Aphodius scybalarius, F. ab. nigricans, Muls.; found at Deal; introduced by Mr. Jennings (loc. cit., p. 155).

Malthodes minimus, L. var. marginicollis, Schil., taken by Mr.

Donisthorpe (Ent. Record, xx., p. 82), at Cobham, July, 1907.

The following changes in synonymy have been recorded during the year:—Lathrobium clongatum, L. var. nigrum, Joy = var. fraudulentum, Gangl. (Champion, Ent. Mo. Mag., p. 1); Ceuthorhynchidius rhevrolati, Bris. = ('. barnevillei, Gren.; Ceuthorhynchus chalybaeus, Germ. = C. tumidus, Weise (Champion loc. cit. p. 1); Epuraea oblonga, Hbst. = E. thoracica, Tourn. (Joy, loc. cit., p. 106); Dasytes oculatus, Brit. Cat., = D. plumbeus, Mull. (Newbery, loc. cit., p. 156); and, lastly, it appears, if we follow continental opinion on the matter, we must sink Hydnobius punctatissimus, Steph., as it is a variety only of H. punctatus, Stm. (Ganglbauer, "Die Kafer von Mitteleuropa," vol. iii., p. 206); Mr. Champion draws attention to this (Ent. Mo. Mag., vol. xliv., p. 1).

We have thus an apparent addition of 28 species and 6 varieties, while two species are deleted, but at least two of the new species are of extremely doubtful value—to one I would even decline varietal rank, and there is a doubt as to the accuracy of the determination of a third, but even with these deductions it presents a remarkable increase to our list, and I know of several other additions, which will be shortly announced, some of which will be genuinely new to science.

I can only mention a few of the more interesting captures of rare species recorded during the year. Mr. de la Garde records Hydrochus nitidicollis, Muls., and Hydraena pygmaca, Wat., from Christow, Devon, and Arena octavii, Fauv., from Dawlish Warren; Mr. Chaster, Deliphrum crenatum, Gr., from Helensburgh; Commander Walker, Cryptophagus schmidti, Stm., from Strood; Lathrobium pallilum, Nor., and Pselaphus dresdensis, Hbst., from Oxford; Dr. Joy, Laemophloeus monilis, F., from Streatley; Mr. Donisthorpe, Agrilus biguttatus, F., from Sherwood; Trogolinus anglicanus, Shp., from the Isle of Wight; Mr. Bedwell, Procas armillatus, F., from Sherwood, and Gnorimus variabilis, L., from Purley Oaks; Mr. Thompson, Corymbites castaneus, L., from Pately Bridge; and the writer, Cryptophagus subdepressus, Gyll., from Nethy Bridge; Mr. Day, Brontes planatus, L., from Carlisle; Mr. W. E Sharp, Gnorimus nobilis, L., from South Bucks.

Several interesting notes have appeared in our entomological To the pages of the (Ent. Mo. Mag.) Dr. Joy has contributed (p. 38) a series of useful notes on the genus Colon; he has given some fresh characters for identification of the more difficult species, and hints as to the best method of capturing them; a table for the British species of Epuraea (p. 106), which will be found most useful by collectors who are usually much puzzled in the identification of several species of the genus; a table, and notes (p. 125) on the genus Corticaria, to which I have already alluded; a note on the coleoptera of the Scilly Islands (p. 175) in which he has detailed the results of the collection he made on the Islands last April, adding 126 to the previously known species, bringing the total number now recorded from the Islands up to 275—this must surely be only a small proportion of the real number of species in the Islands; and, lastly (p. 246), some additional notes on moles' nest coleoptera; in reference to this latter point, I may mention that my friend, Mr. Evans, will shortly publish a paper on our joint researches into the fauna of moles' nests in Scotland, but I may say at once that Dr. Joy is mistaken in thinking that Oxypoda longipes, Muls., is not an inhabitant of moles' nests in Scotland; we have found it in many nests and in some numbers—the few taken at large in Scotland have evidently been wanderers from the nests. Mr. J. Edwards has published (Ent. Mo. Mag., xliv., p. 220) a table for the British species of the genus Helophorus, which will, I feel sure, simplify our labours in determining more difficult species of this genus. Mr. Champion (loc. cit., p. 233) draws attention to the fact that Dermestes aurichalcicus, Kust., and Micrambe perrisi, Bris., are found on the continent in nests made by Bombycid larvæ, and he suggests that search should be made in their nests in this country.

In the Ent. Record, Mr. Donisthorpe publishes (p. 281) a first instalment of his interesting Myrmecophilous Notes for the year, and Mr. H. W. Ellis and Mr. A. H. Martineau also contribute (p. 56) some notes on the same subject, giving an account of their field work in the neighbourhood of Birmingham. Mr. Balfour Browne in the same journal (p. 25) published a paper entitled "Notes on the British Species of the Genus Philydrus, Solier," giving a table for the separation of our species, and notes as to their distribution; lastly, Mr. W. E. Sharp (p. 87) discusses, in a paper on the British List, the vexed question of what constitutes the right of a beetle to a true place

in our indigenous fauna.

In the Transactions of the Entomological Society of London only a few papers dealing with coleoptera have appeared this year. In Part iv. for 1907 (issued February 14th, 1908), appeared Mr. Donisthorpe's paper "The Life-History and Occurrence as British of Lomechusa strumosa, F.," in which the author gave an account of his own observations in the field and in his observation nest, and figured the larva and his dissections of the secretory glands. In Pt. ii. for 1908 (issued September 29th, 1908), is a paper by Mr. C. J. Gahan on the larvæ of Trictenotoma childreni, Gray, Melittomma insulare, Fairmaire, and Dascillus cerrinus, L., an interesting paper in view of the divergence of opinion as to the systematic position of the Trichenotomidae. Mr. Gahan is of opinion, as the result of his study of the larva, that this family should be placed near the beginning of the Heteromerous series—the larva of Dascillus has a general resemblance to those of the Lamellicorns—it is a root-feeder. The only other paper in this part which I have to notice is by Mr. G. J. Arrow on the classification of the coleopterous family Dynastidae; this paper deals principally with Oriental species, which have been somewhat neglected, the new species described are in the British Museum collection; altogether 11 new genera and 25 new species are described.

The thirty-first Annual Report (1907) of the Lancashire and Cheshire Entomological Society contains two papers of great interest and value—Dr. Bailey's Vice-Presidential Address on the Coleoptera of the Isle of Man, and Mr. W. E. Sharp's list of the coleoptera of Lancashire and Cheshire. Dr. Bailey, after giving a general survey of the Island of Man as a collecting-ground for the coleopterist, and a list of some of the more noteworthy species to be met with, discusses very fully the division of the species into the various distributional groups which it is considered we possess in these islands; this is a

part of the paper of great interest to all coleopterists, and should be carefully studied. I notice one or two slips—surely for *Bidessus unistriatus*, Schr., mentioned as belonging to the Western group, is meant *Bidessus minutissimus*, Germ.; further *Rhopalomesites tardyi*, Curt., has occurred commonly near Scarborough, and is not purely Western. Mr. W. E. Sharp's list brings the Lancashire and Cheshire list up to 1586 species, or about 45 per cent. of the British list. May I express the hope that this list will be used as a model by all local societies who may in the future undertake the work of compiling a local list in any order of insects?

Commander Walker has issued a supplement to his Oxford List, bringing it up to the end of 1907, adding 183 species, and making the total now 1580, a fine record for such a small area, and testifying to

the zeal of the local workers.

In the Zoologist (February, 1908) appeared a translation by Mr. Donisthorpe of a short paper by Father Wasmann, on the evolution of the genus *Dinarda*, of much interest to those of us who are trying to form theories as to the evolution of new species and genera.

In the Annals of Scottish Natural History for January, 1908, appeared two short papers by Dr. Joy and the writer on the

coleopterous fauna of the lonely island of St. Kilda.

The last paper I have to notice appeared in the Journal of the Linnean Society, vol. xxx., no. 197, p. 157; it was entitled "Life-Histories and Larval Habits of the Tiger Beetle," and is illustrated with plates; it is the work of Mr. C. E. Shelford, and describes that gentleman's observations in the field and in the rirarium, of the life-histories of twelve species or races of tiger beetles occurring in the neighbourhood of Chicago; it is a paper I would strongly advise all our younger coleopterists to read carefully.

In bringing my "Retrospect" to a conclusion, I am glad to be able to express the opinion that the past year has been a fruitful one, and has given proof that we are slowly realising the importance of the study

of life-histories, and the small value of mere collections.

Notes from a lepidopterist's diary for 1908.

By JOSEPH OVENDEN.

Early in January, 1908, I paid a visit to the haunts of Hellinsia carphodactyla, expecting to find the larvæ snug in their hybernacula, but, although a few days before the ground had been covered with snow, I found the larvæ sunning on the foodplants just at the entrance of their burrows, while all around were traces of recent feeding and frass; the larvæ were at this time about an eighth of an inch in length. I split several of the mined plants up, but in no case did I find any traces of hybernating larvæ, so concluded that they come up from the mine in the central stem to sun themselves whenever the weather is fine enough all the winter. During January and February, Phigalia pedaria (pilosaria), Cheimatobia brumata, Hybernia rupicapraria and H. progemmaria occasionally decorated the street lamps on the outskirts of the town, whilst, after March, Anisopteryæ aescularia were to be seen in their company. Aglais urticae was first noted ou March 2nd. During March and April I turned my attention to the stems of the